

ABSTRACT

The retention balloon of the Foley urinary drainage catheter is replaced by a new self-retaining system . This new self-retaining catheter eliminates the problem of residual urine and also of bladder wall irritation caused by continuous contact with a spherical retention balloon; it also does not rely on a stylet for placement. The new system may use an internal control wire that reversibly foreshortens the proximal end of the catheter thus radially displacing longitudinal strips defined in the proximal catheter to form retention wings. Alternatively, a balloon situated between the longitudinal strips is inflated to force open the retention wings once inside the urinary bladder. Radial displacement of the retention wings widens the spaces between the longitudinal strips, these spaces constituting the drainage apertures which permit complete emptying of the urinary bladder, thereby eliminating a source of bladder irritation. The radially displaced retention wings abut the bladder wall in a non-continuous manner thereby reducing the area of bladder-catheter contact and further reducing bladder wall irritation.